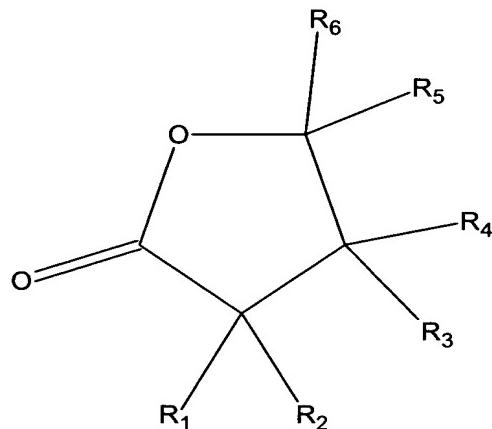


AMENDMENTS TO THE CLAIMS

1. (Original) A process for the liquefaction of lignocellulosic or cellulosic material, wherein solid lignocellulosic or cellulosic material is heated at a temperature in the range of from 100 to 300 °C in the presence of an acid catalyst and a solvent, wherein the solvent-to-solid material weight ratio is at most 50, the acid catalyst is present in a concentration of at most 50% by weight of acid based on the weight of solvent and acid, and the solvent comprises a compound having a gamma lactone group of the general molecular formula

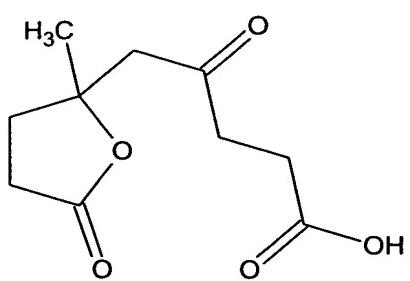


(1)

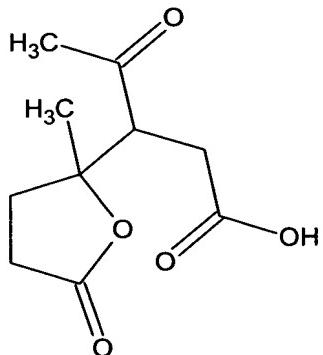
wherein R₁ to R₆ each represent, independently, a hydrogen atom or an organic group connected with a carbon atom to the lactone group.

2. (Original) A process according to claim 1, wherein R₁, R₂, R₃ and R₄ each are a hydrogen atom.

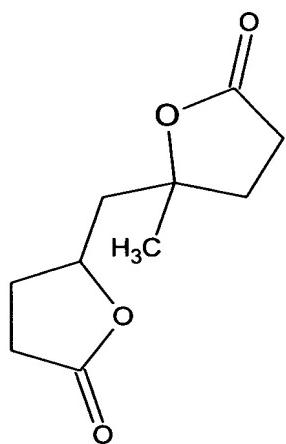
3. (Currently Amended) A process according to claim 2, wherein R₅ is a methyl group, ~~preferably a process wherein~~ the compound having a gamma lactone group is gamma valerolactone (R₆ is a hydrogen atom), 2-methyl-5-oxotetrahydrofuran-2-carboxylic acid (R₆ is a carboxyl group), a compound having a molecular structures structure according to any one of molecular formulas (2) to (5):



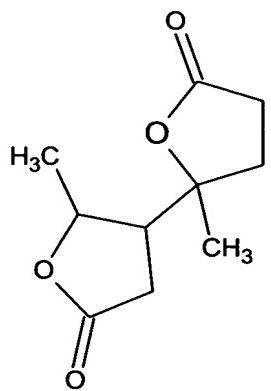
(2)



(3)



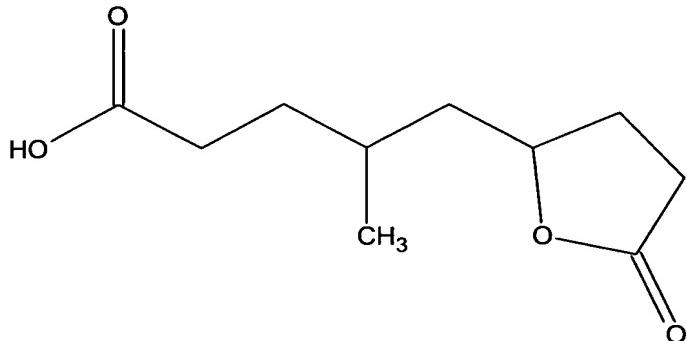
(4)



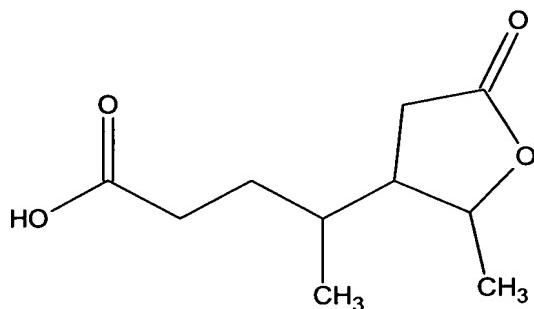
(5)

or an ester of a compound having a molecular structure according to molecular formula (2) or (3).

4. (Original) A process according to claim 1, wherein the compound having a gamma lactone group has a molecular structure according to molecular formula (6) or (7):



(6)



(7)

or is an ester of a compound having a molecular structure according to molecular formula (6) or (7).

5. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the compound having a gamma lactone group is obtainable from levulinic acid by hydrogenation, dehydration, aldolcondensation, dimerisation or oligomerisation, esterification with an alcohol, or a combination of two or more of these reactions.

6. (Original) A process for the liquefaction of lignocellulosic or cellulosic material, wherein solid lignocellulosic or cellulosic material is heated at a temperature in the range of from 100 to 300 °C in the presence of an acid catalyst and a solvent, wherein the solvent-to-solid material weight ratio is at most 50, the acid catalyst is present in a

concentration of at most 50% by weight of acid based on the weight of solvent and acid, and the solvent comprises furfural, levulinic acid or a compound obtainable from furfural or levulinic acid by hydrogenation, dehydration, aldolcondensation, dimerisation or oligomerisation, esterification with an alcohol, or a combination of two or more of these reactions.

7. (Original) A process according to claim 6, wherein the solvent comprises furfural or a compound obtainable from furfural selected from tetra hydrofurfuryl alcohol, furfuryl alcohol, di-ether of furfuryl alcohol, dimers or oligomers of furfural or furfuryl alcohol.

8. (Currently Amended) A process according to claim 6, wherein the solvent comprises levulinic acid, an alkyl ester of levulinic acid, a C₅ compound obtainable by hydrogenation and/or dehydration of levulinic acid, or a dimer or oligomer of such C₅ compound, ~~in particular of alpha-angelica lactone~~, a dimer of levulinic acid obtainable by aldolcondensation, dehydration and optionally hydrogenation, or an alkyl ester of such dimer.

9. (Original) A process according to claim 8, wherein the solvent comprises levulinic acid, alpha-angelica lactone, 1,4-pantanediol, 1-pentanol, 4-methyl-6-oxononanedioic acid, the di-methyl or di-ethyl ester of 4-methyl-6-oxononanedioic acid, ethyl levulinate, butyl levulinate, pentyl levulinate, or a combination of two or more thereof.

10. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the solvent ~~essentially consists~~ essentially of one or more of the solvent compounds defined in ~~any one of the preceding claims~~ claim 1.

11. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the acid catalyst is a strong mineral or organic acid having a pKa below 4.7, ~~preferably below 3.5, more preferably below 2.5~~.

12. (Currently Amended) A process according to claim 11, wherein the acid is phosphoric acid or sulphuric acid, ~~preferably phosphoric acid~~.

13. (Original) A process according to claim 11, wherein the acid is oxalic acid, 2-oxopropanoic acid, maleic acid, (1E)-prop-1-ene-1,2,3-tricarboxylic acid, 2,3-dihydroxysuccinic acid, furan-2,5-dicarboxylic acid, or a combination of two or more thereof.

14. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the acid catalyst is present in a concentration of at most 20% by weight, ~~preferably of from 0.1 to 10% by weight, more preferably of from 0.5 to 5% by weight~~.

15. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the solvent-to-solid material weight ratio is in the range of from 3 to 20, ~~preferably of from 5 to 15~~.

16. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the temperature is in the range of from 120 to 250 °C, ~~preferably of from 150 to 210 °C~~.

17. (Currently Amended) A process according to ~~any one of the preceding claims~~ claim 1, wherein the pressure is in the range of from 0.1 to 15 bar (absolute), ~~preferably in the range of from 0.5 to 10 bar (absolute), more preferably in the range of from 0.8 to 3 bar (absolute), most preferably is ambient pressure~~.

18. (New) A process according to claim 2, wherein the compound having a gamma lactone group is obtainable from levulinic acid by hydrogenation, dehydration, aldolcondensation, dimerisation or oligomerisation, esterification with an alcohol, or a combination of two or more of these reactions.

19. (New) A process according to claim 3, wherein the compound having a gamma lactone group is obtainable from levulinic acid by hydrogenation, dehydration,

aldolcondensation, dimerisation or oligomerisation, esterification with an alcohol, or a combination of two or more of these reactions.

20. (New) A process according to claim 4, wherein the compound having a gamma lactone group is obtainable from levulinic acid by hydrogenation, dehydration, aldolcondensation, dimerisation or oligomerisation, esterification with an alcohol, or a combination of two or more of these reactions.